Exploring Tinted Graphic Complications

Jared McGann, watchOS Engineering Manager
Tinted Gauges

Displayed in a solid color
- System determines tint color
Tinted Gauges

Displayed in a solid color

• System determines tint color
Tinted Text

Displayed in a single color
Tinted Text

Displayed in a single color
Tinted Images

Desaturated by default

New API in CLKFullColorImageProvider to provide alternate images
Tinted Images

Desaturated by default

New API in CLKFullColorImageProvider to provide alternate images
Data Providers

Manage the data you display in a complication

Text, images and gauges

• Examples: CLKSimpleTextProvider, CLKTimeIntervalTextProvider, CLKFullColorImageProvider, CLKSimpleGaugeProvider, ...
open class CLKFullColorImageProvider : NSObject, NSCopying {

    open var image: UIImage

    open var accessibilityLabel: String?

}
// CLKFullColorImageProvider

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    open var image: UIImage

    open var accessibilityLabel: String?

}
// Alternate image for tinted contexts

open class CLKFullColorImageProvider : NSObject, NSCopying {

    open var image: UIImage

    open var accessibilityLabel: String?

    open var tintedImageProvider: CLKImageProvider?

}
open class CLKImageProvider : NSObject, NSCopying {

    open var onePieceImage: UIImage

    open var tintColor: UIColor?

    open var twoPieceImageBackground: UIImage?

    open var twoPieceImageForeground: UIImage?

    open var accessibilityLabel: String?

}
// CLKImageProvider

open class CLKImageProvider : NSObject, NSCopying {

  open var onePieceImage: UIImage

  open var tintColor: UIColor?

  open var twoPieceImageBackground: UIImage?

  open var twoPieceImageForeground: UIImage?

  open var accessibilityLabel: String?

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// CLKImageProvider

open class CLKImageProvider : NSObject, NSCopying {

    open var onePieceImage: UIImage

    open var tintColor: UIColor?

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    open var twoPieceImageForeground: UIImage?

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}
// CLKImageProvider

open class CLKImageProvider : NSObject, NSCopying {

    open var onePieceImage: UIImage

    open var tintColor: UIColor?

    open var twoPieceImageBackground: UIImage?

    open var twoPieceImageForeground: UIImage?

    open var accessibilityLabel: String?

}
// Tinted Image – Default Behavior

```swift
var fullColorImage = UIImage(named: "FullColorImage")!

var imageProvider = CLKFullColorImageProvider(fullColorImage: fullColorImage)

var imageProviderAlt = CLKFullColorImageProvider(fullColorImage: fullColorImage,
tintedImageProvider: nil)
```
// Tinted Image - One-Piece Image

var fullColorImage = UIImage(named: "FullColorImage")!

var onePieceImage = UIImage(named: "MonochromeImage")!
var tintedImageProvider = CLKImageProvider(onePieceImage: onePieceImage)

var imageProvider = CLKFullColorImageProvider(fullColorImage: fullColorImage, tintedImageProvider: tintedImageProvider)
// Tinted Image – One-Piece Image

var fullColorImage = UIImage(named: "FullColorImage")!

var tintedImageProvider = CLKImageProvider(onePieceImage: fullColorImage)

var imageProvider = CLKFullColorImageProvider(fullColorImage: fullColorImage, tintedImageProvider: tintedImageProvider)
// Tinted Image - Two-Piece Image

var fullColorImage = UIImage(named: "FullColorImage")!

var onePieceImage = UIImage(named: "MonochromeImage")!
var backgroundImage = UIImage(named: "BackgroundImage")!
var foregroundImage = UIImage(named: "ForegroundImage")!
var tintedImageProvider = CLKImageProvider(onePieceImage: onePieceImage,
twoPieceBackgroundImage: backgroundImage, twoPieceForegroundImage: foregroundImage)

var imageProvider = CLKFullColorImageProvider(fullColorImage: fullColorImage,
tintedImageProvider: tintedImageProvider)
Water Reminders
32 oz. consumed
4 day streak! Woohoo!

💧 Water Reminder
32 oz. consumed

68 BPM, 2 MINS AGO

<table>
<thead>
<tr>
<th>Time</th>
<th>Heart Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>12AM</td>
<td>102</td>
</tr>
<tr>
<td>6AM</td>
<td>102</td>
</tr>
<tr>
<td>12PM</td>
<td>102</td>
</tr>
<tr>
<td>6PM</td>
<td>52</td>
</tr>
</tbody>
</table>
Water Reminders
32 oz. consumed
4 day streak! Woohoo!

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Key Takeaways

Complications are altered in tinted contexts

System always determines color

New API to provide alternate template images
More Information

developer.apple.com/wwdc19/253